

ABSTRACT OF THE DISCLOSURE

[0030] A preferred embodiment of the present invention provides a Schottky diode formed from a conductive anode contact, a semiconductor junction layer supporting the conductive contact and a base layer ring formed around at least a portion of the conductive anode contact. In particular, the base layer ring has material removed to form a base layer material gap (e.g., a vacuum gap) adjacent to the conductive anode contact. A dielectric layer is also provided to form one boundary of the base layer material gap.